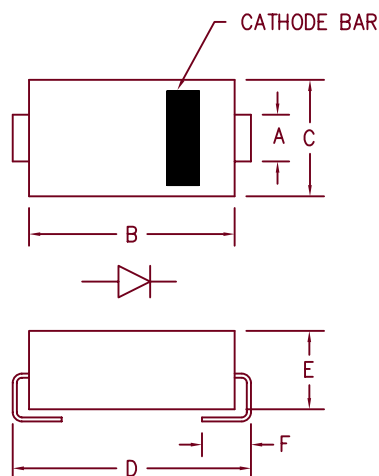


# 3 Amp Schottky Rectifiers SK32B — SK310B



| Dim. | Inches  |         | Millimeter |         | Notes |
|------|---------|---------|------------|---------|-------|
|      | Minimum | Maximum | Minimum    | Maximum |       |
| A    | .068    | .087    | 1.73       | 2.21    |       |
| B    | .157    | .177    | 3.99       | 4.50    |       |
| C    | .130    | .155    | 3.30       | 3.94    |       |
| D    | .194    | .228    | 4.93       | 5.79    |       |
| E    | .078    | .115    | 1.98       | 2.92    |       |
| F    | .030    | .060    | .760       | 1.52    |       |

SMB  
DO-214AA

| Microsemi<br>Catalog Number | Working Peak<br>Reverse Voltage | Repetitive Peak<br>Reverse Voltage |
|-----------------------------|---------------------------------|------------------------------------|
| SK32B                       | 20V                             | 20V                                |
| SK33B                       | 30V                             | 30V                                |
| SK34B                       | 40V                             | 40V                                |
| SK36B                       | 60V                             | 60V                                |
| SK38B                       | 80V                             | 80V                                |
| SK310B                      | 100V                            | 100V                               |

- Schottky Barrier Rectifier
- Low Forward Voltage Drop
- 20-100 Volts
- Low switching losses
- Round lead design

## Electrical Characteristics

|                                         |             |       |                                            |
|-----------------------------------------|-------------|-------|--------------------------------------------|
| Average forward current                 | $I_F(AV)$   | 3.0A  | $T_J = 120^\circ C$                        |
| Maximum surge current                   | $I_{FSM}$   | 100A  | 8.3ms half-sine                            |
| Max repetitive reverse current          | $I_{R(OV)}$ | 2A    | $f = 1KHZ, 25^\circ C, 1\mu s$ square wave |
| Max peak forward voltage (SK32B-SK34B)  | $V_{FM}$    | .50V  | $I_{FM} = 3.0A; T_J = 25^\circ C^*$        |
| Max peak forward voltage (SK36B)        | $V_{FM}$    | .75V  | $I_{FM} = 3.0A; T_J = 25^\circ C^*$        |
| Max peak forward voltage (SK38B-SK310B) | $V_{FM}$    | .85V  | $I_{FM} = 3.0A; T_J = 25^\circ C^*$        |
| Max peak reverse current                | $I_{RM}$    | .5mA  | $V_{RRM}, T_J = 25^\circ C$                |
| Max peak reverse current                | $I_{RM}$    | 20mA  | $V_{RRM}, T_J = 100^\circ C^*$             |
| Typical junction capacitance            | $C_J$       | 250pF | $V_R = 5.0V, T_J = 25^\circ C$             |

\*Pulse test: Pulse width 300  $\mu s$ , Duty cycle 2%

## Thermal and Mechanical Characteristics

|                               |                 |                                |
|-------------------------------|-----------------|--------------------------------|
| Storage temperature range     | $T_{STG}$       | $-55^\circ C$ to $150^\circ C$ |
| Operating junction temp range | $T_J$           | $-55^\circ C$ to $125^\circ C$ |
| Maximum thermal resistance    | $R_{\theta JC}$ | $10^\circ C/W$                 |



8700 East Thomas Road, P.O. Box 1390  
Scottsdale, AZ 85252  
PH: (480) 941-6300  
FAX: (480) 947-1503  
[www.microsemi.com](http://www.microsemi.com)

05-30-07 Rev. 2

# SK32B — SK310B

Figure 1  
Typical Forward Characteristics

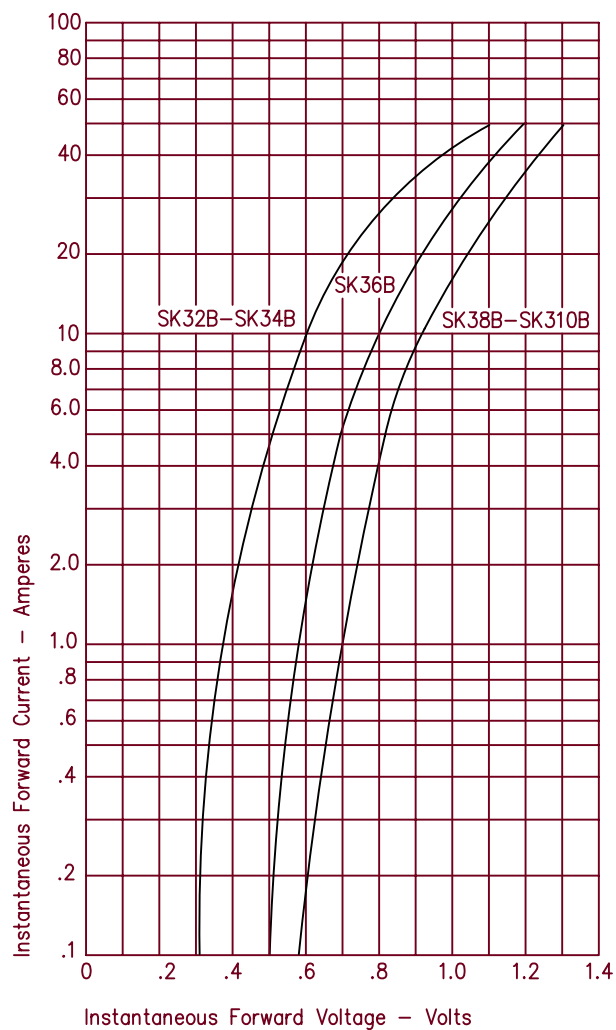


Figure 3  
Typical Junction Capacitance

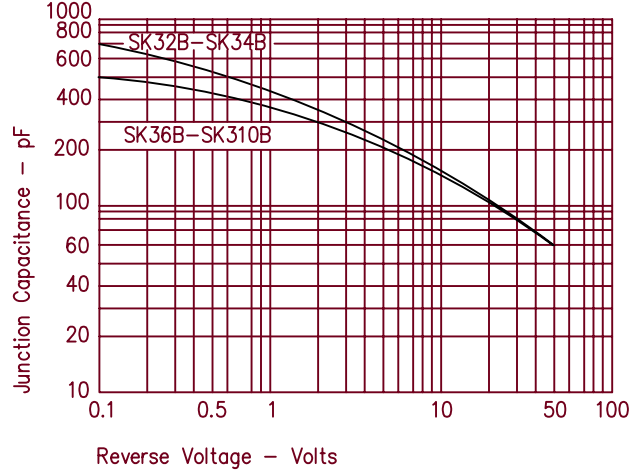


Figure 2  
Typical Reverse Characteristics @ 100°C

